

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-12 (Canceled).

Claim 13 (New): A thermal CVD method of forming an insulating film, consisting essentially of a film selected from the group consisting of a silicon oxide film, silicon nitride film, and silicon oxynitride film, the method comprising:

supplying first, second, and third gases into a process chamber that accommodates a target substrate, while heating an interior of the process chamber at a process temperature and exhausting the interior of the process chamber, thereby forming the insulating film on the target substrate by deposition,

wherein the first gas consists essentially of a silane family gas selected from the group consisting of hexachlorodisilane, hexaethylaminodisilane, bis(tert-butyl)aminosilane, and dichlorosilane,

the second gas consists essentially of a gas selected from the group consisting of an oxidizing gas, nitriding gas, and oxynitriding gas,

the third gas consists essentially of ethylene, and is supplied into the process chamber without pre-heating, and

the process temperature is set to fall within a range of from 450 to 600°C.

Claim 14 (New): The method according to claim 13, comprising simultaneously processing a plurality of target substrates stacked with a gap therebetween in the process chamber.

Claim 15 (New): The method according to claim 13, wherein a flow rate ratio of the third gas relative to the first gas is set to fall within a range of from 10 to 100.

Claim 16 (New): The method according to claim 15, wherein a flow rate ratio of the third gas relative to the first gas is set to fall within a range of from 15 to 85.

Claim 17 (New): The method according to claim 15, wherein a flow rate ratio of the third gas relative to a total of the first and second gases is set to fall within a range of from 0.3 to 3.2.

Claim 18 (New): The method according to claim 17, wherein a flow rate ratio of the third gas relative to a total of the first and second gases is set to fall within a range of from 0.4 to 2.8.

Claim 19 (New): The method according to claim 13, wherein the second gas consists essentially of a nitriding gas.

Claim 20 (New): The method according to claim 19, wherein the nitriding gas consists essentially of NH_3 .

Claim 21 (New): The method according to claim 13, wherein the first gas consists essentially of hexachlorodisilane.

Claim 22 (New): A thermal CVD method of forming an insulating film consisting essentially of a silicon nitride film simultaneously on a plurality of target substrates stacked with a gap therebetween in a process chamber, the method comprising:

supplying first, second, and third gases into the process chamber that accommodates the target substrates, while heating an interior of the process chamber at a process temperature and exhausting the interior of the process chamber, thereby forming the insulating film on the target substrates by deposition,

wherein the first gas consists essentially of a silane family gas selected from the group consisting of hexachlorodisilane, hexaethylaminodisilane, bis(tert-butyl)aminosilane, and dichlorosilane,

the second gas consists essentially of a nitriding gas,

the third gas consists essentially of ethylene, and is supplied into the process chamber without pre-heating,

the process temperature is set to fall within a range of from 450 to 600°C,

a flow rate ratio of the third gas relative to the first gas is set to fall within a range of from 10 to 100, and

a flow rate ratio of the third gas relative to a total of the first and second gases is set to fall within a range of from 0.3 to 3.2.

SUPPORT FOR THE AMENDMENT

Claims 1-12 are canceled.

Claims 13-22 are added.

Claims 13-22 are supported by claims 1-10, the specification at page 4, lines 8-25 and page 22, lines 5-12, as originally filed.

No new matter has been added by the amendments.

Upon entry of this amendment, claims 13-22 will be pending in this application.